





Method for the production of silicon carbide with a high specific surface and its use in high-temperature catalytic reactions.

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The invention is directed to a process for the production of fine grains of silicon carbide which are formed by an agglomerate of submicronic grains having a specific surface area that is at least $100 \text{ m}^2/\text{g}$, which are intended in particular to serve as a carrier for catalysts for petrochemistry, and for catalytic reactions at elevated temperature which can attain 1000°C ., the process comprising reacting vapors of silicon monoxide SiO on carbon, being characterized by: generating vapors of SiO in a first reaction zone by heating a mixture $\text{SiO}_2 + \text{Si}$ at a temperature of between 1100°C and 1400°C ., under a pressure of between 0.1 and 1.5 hPa; and, in a second reaction zone, contacting the SiO vapors with reactive carbon in the divided state with a specific surface area that is at least equal to $200 \text{ m}^2/\text{g}$ at a temperature of between 1100°C and 1400°C .

Preferably, the reactive carbon is doped by an addition of from 1 to 10% by weight of a metallic element selected from uranium, cerium, titanium, zirconium, hafnium and lanthanides.

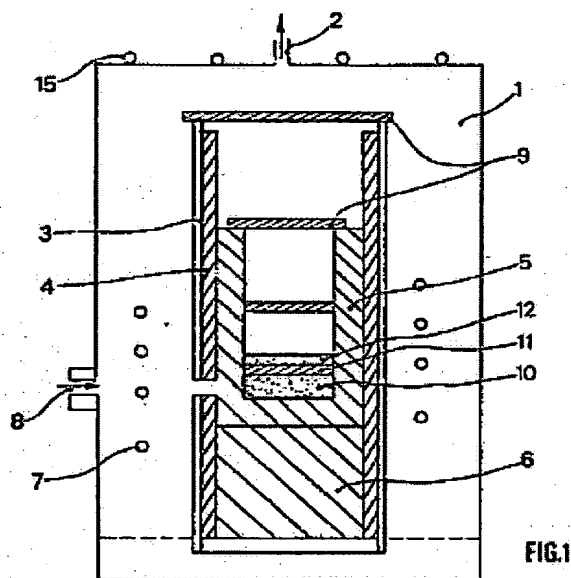


FIG. 1

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